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Report to the Ecodesign Consultation Forum on the review of the specific ecodesign requirements on the durability of the hose and the operational motor lifetime according to Article 7(2) of the Commission Regulation (EU) No 666/2013 with regard to ecodesign requirements for vacuum cleaners

1. CONTEXT

Commission Regulation (EU) No 666/2013 with regard to ecodesign requirements for vacuum cleaners[1] indicates that from the 1 January 2017, the hose, if any, shall be durable so that it is still usable after 40 000 oscillations under strain and that the operational motor lifetime shall be greater than or equal to 500 hours.

Article 7(2) of the Regulation indicates that the Commission shall review the specific ecodesign requirements on the durability of the hose and the operational motor lifetime and present the result of that review to the Consultation Forum no later than 1 September 2016.

To this end, a study was carried out to assess the existing test methods for determining the durability of the hose and the operational motor lifetime, and to evaluate any alternative test methods.

The study started in December 2015. Stakeholders from Member States authorities, industry, relevant standardisation technical committees and working groups, civil society, consumers and environmental NGOs were actively involved since the beginning, and one public stakeholder meeting was held in April 2016. The study was finalised in June 2016. The final report of the study can be found here[2].

This report to the Consultation Forum, in conjunction with the mentioned study, fulfils the Commission's obligation to review the specific ecodesign requirements on the durability of the hose and the operational motor lifetime, and to report on this to the Consultation Forum.

The results of the review, based on the study's key findings, are presented in the next chapters.

The Consultation Forum's views on these are sought.

2. REVIEW OF THE SPECIFIC ECODESIGN REQUIREMENT ON THE DURABILITY OF THE HOSE

The study concluded that the validity of the specific requirement is unquestioned and that the technical test used to identify the durability of the hoses is unproblematic. However, there is an issue with the nature of the hoses which are subject to the ecodesign requirement.

The current technical test for the durability of the hoses is set-up in clause 6.9 ‘Repeated bending of the hose’ in the harmonised standard EN 60312-1:2013. It has been used for many years by industry and consumer associations to identify the bending properties of the primary hoses of cylinder vacuum cleaners.

[1] OJ L 192, 13.7.2013, p. 24.

[2] The study is publically accessible on the project website www.ia-vc-art7.eu

However, the test is not relevant for the hoses of upright vacuum cleaners for which elongation properties are essential, contrary to bending properties. Indeed, the secondary hoses of upright vacuum cleaners are completely different from the hoses that are used in cylinder vacuum cleaners. They are highly flexible and they are made to be extended roughly twice their original length. They are used for 'above the floor' cleaning, i.e. of curtains, stairs, furniture, etc. and are a standard accessory of almost all upright cleaners. These appliances represent around 5% of the EU market, mainly concentrated in the UK.

Three options could be considered for future actions:

1. No action: primary hoses of cylinder type vacuum cleaners are covered with the current harmonised bending test method. The test would cover 95% of all household vacuum cleaners in the EU.

2. Use the current harmonised test method to also cover secondary hoses of upright vacuum cleaners. Nevertheless, the bending test might be useless in predicting the actual durability of this secondary hose as the properties of the upright hoses are different, i.e. elongation instead of bending properties.

3. Develop a new dedicated test to cover secondary hoses of upright type vacuum cleaners where most of the damage is expected to come from prolonging, contracting and pulling the hose, rather than, as is the case with cylinder vacuum cleaner hoses, from bending. Developing such a test would take several years.

Option 1 can be seen as the easiest and fastest to implement though it would not be fully technology neutral. This quick and pragmatic option appears to be the preferred one, in the context of the current specific short term review of this requirement.

Option 2 seems an inappropriate measure as it would most likely introduce a futile test.

Option 3 appears to be the most appropriate one but would take time to implement and would be cost and resources consuming as a new standard would have to be developed. Moreover, the Regulation would have also to be amended to cover the new test, in particular as regards the ecodesign requirement on the hose (in Annex I) and the measurement and calculation method for the durability of the hose (in Annex II).

In conclusion, the Commission services see merits in option 1 as the preferred way forward at this stage.

3. REVIEW OF THE SPECIFIC ECODESIGN REQUIREMENT ON THE OPERATIONAL MOTOR LIFETIME

The study concluded that the validity of the specific requirement on the operational motor life is unquestioned.

There is however an issue with the test method to determine the operational motor life included in the Regulation (Annex II) and in the current harmonised standard EN 60312-1:2013 (clause 6.10). This method indicates to run the durability test with a half-loaded dust receptacle during a minimum of 500 hours.

The study shows that the explicit requirement to perform the durability test at half-loaded receptacle makes the test expensive, less reproducible and unattractive for spot-checks. It is therefore opposed by all stakeholders that have to perform that test (industry, consumer associations, market surveillance authorities).

The alternative is a test with an empty receptacle and in the stakeholder meeting there was broad support for such a test.

However, from a legal perspective the main problem is that Annex II of the Regulation is very explicit that the operational motor life-time test should be undertaken with a 'half-loaded receptacle' and for at least 500 hours and a maximum of 600 hours.

Five options could be considered for future actions:

1. No action.

2. Amendment of Annex II, Point 8 of Regulation: this option would create legal certainty but would take time and represent a significant administrative burden because the amendment, which anyway would only be applicable for a few years until the upcoming full review, has to follow the same decision making process as a full review of the legislation.

3. Transitional method which defines 550 hours[3] testing at empty receptacle to be equivalent to 500 hours at half-loaded receptacle: this option would bring transparency to the process, but has the disadvantage not to be referenced in the legislation and may thus create legal disputes, especially when the method is not 'covered' by any other source such as a harmonised standard.

4. Harmonised EN-standard which would indicate that an empty dust receptacle could be used during the test; in which case, the recommended testing time shall be increased by 10%[4] of the stated motor life value for testing with a half loaded dust receptacle: this option would address the issues with the existing test but would not solve the legal discrepancy with the Regulation.

5. Combination of a transitional method and a harmonised standard underpinning that method: this combination would be a relatively quick and pragmatic solution in the context of the current specific short term review of this durability requirement, but would not address the legal discrepancy with the Regulation.

In conclusion, the Commission services see the merit of option 1 as the preferred way forward to avoid legal discrepancies. The regular revision of the Regulation in 2018 would then be used to address this issue in the Regulation.

[3] As discussed during the study stakeholders meeting on 25 April 2016. The reason for suggesting this figure is discussed in the technical study www.ia-vc-art7.eu

[4] Idem